

REPORT

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MEDICAL OFFICER OF HEALTH.

FOR THE YEAR 1896.

HEATON NORRIS
URBAN DISTRICT COUNCIL.

REPORT

OF THE
MEDICAL OFFICER OF HEALTH
TO THE

Heaton Norris Urban District Council,
For the year 1896.

*A Summary of the action taken during the year to
prevent the spread of Disease.*

The following table gives the incidence of Notifiable
Disease in the District :—

	Scarlet Fever.										Diph- theria			M. Group		Enteric Fever		Erysip- elas		Totals	
	Jan.	Feb.	April	May	June	July	Aug.	Sept.	Nov.	Dec.	Feb.	May	June	Jan.	Oct.	Nov.	May	Dec.	1896	1895	
Heaton Chapel Ward	0	2	0	0	3	4	0	0	0	0	1	1	1	0	1	1	0	0	14	2	
Heaton Moor East Ward...	4	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	1	0	9	10	
Heaton Moor West Ward...	2	1	1	1	0	0	2	0	0	0	0	0	0	0	1	0	0	0	8	9	
Heaton Mersey Ward	0	4	2	0	1	1	0	1	1	3	0	0	0	1	0	0	0	1	15	7	
<i>Total.....</i>	6	7	3	1	6	6	3	1	1	3	1	1	1	1	2	1	1	1	46	0	
1896	37										3			1		3		2			
1895	15										1			1		8		3		28	

Of these cases 9 were sent to Hospital, 6 of them at the
expense of the District Council.

Of Infectious Diseases there were reported in

1890.....	32 cases	1894.....	47 cases
1891.....	36 „	1895.....	28 „
1892.....	30 „	1896.....	46 „
1893.....	147 „		

The larger number for the past year is due to the increased prevalence of Scarlet Fever, though there was no epidemic. There were localized outbreaks, one of them being of very severe type. I have no doubt there would have been an epidemic at Heaton Mersey had not the District Council promptly removed the cases from the crowded locality in which they occurred.

Two unreported cases of Scarlet Fever were discovered in connection with a Public Laundry. They were promptly dealt with and strict precautions were adopted with success. In all illnesses reported to me the usual enquiries have been made, and especially into the milk supply.

This is the proper place to suggest the desirableness of arranging for a Bacteriological examination in cases of doubtful throat illness. Expense may possibly be saved thereby when it becomes a question of sending cases of Diphtheria to Hospital.

*Account of the Sanitary state of the District generally
at the end of the year.*

A great improvement has been made in Mersey Road, which was a quagmire at the date of my last report; and this is just the state of some of our thoroughfares at the present time. Tatton Road in particular is a disgrace and must be injurious to health; but I suppose nothing more can be done

at present. Our sewerage system is gradually being extended, so that the time is not far distant when it will be available for every house in the District.

There is no doubt the Sanitary state of the District is much better than it was a year ago.

Account of inquiries made as to conditions injurious to health existing in the District, and the proceedings in which the Medical Officer of Health has taken part, or advised under the Public Health Act, 1875.

Investigations have been made into complaints which may be classed as follow :—

1. Structural defects of dwellings.
2. Drain defects
3. Manure and vegetable nuisances and ashpits.
4. Miscellaneous.
5. Special Reports.

1.—STRUCTURAL DEFECTS.

These refer to old cottages, which will gradually be put right.

2.—DRAIN DEFECTS.

These are extremely various in character, but they all emphasize the fact that it is impossible to form a proper opinion of the condition of the drainage system of a building without using the smoke apparatus.

3.—VEGETABLE MANURE AND ASHPIT NUISANCES.

Accumulation of decaying refuse in shop premises required attention on several occasions.

4.—MISCELLANEOUS.

A dirtily kept house, a supposed case of unreported infectious disease, and various other matters. Slaughter-

houses, which were found quite clean and well arranged. We had a successful prosecution for concealment of infectious disease. I must mention here the promptitude with which cases are now removed to Hospital.

5.—SPECIAL REPORTS.

I. As to state of a field which was open for people to deposit rubbish, with the result that the hedge was made good and gaps filled in by order of the Council.

II. As to state of a road which was little better than a quagmire.

III. As to dwellings where privies and ashpits rest against the house-wall; and recommending their conversion to water-closets.

IV.—Water supply.

V. Cow-sheds, Dairies, and Milk Shops.

VI. Bakehouses.

WATER SUPPLY.

The water supply last year was the subject of a great many complaints. Owing to the frequent repairs that were necessary, the water was often turbed. These repairs seem now to have been completed, as I have had no fresh complaints; and I have not observed any turbidity since Sep. 28th.

COW SHEDS, DAIRIES, MILK SHOPS.

I have made a minute inspection of these places, and I sent in to the District Council a detailed report. The following remarks give a fair summary of it :—

Most of the farmers keep more cows than the size of the shippens will permit; the animals are placed too close together—to keep each other warm I suppose. Most of the shippens are well constructed; are fairly well lighted and

ventilated, and are kept clean. In calculating the capacity I have allowed 800 cubic feet to each animal. This is a smaller air space than is recommended by some authorities, but is much more than many animals are getting at present, and this with satisfactory ventilation ought to be sufficient.

Underbank Farm, occupied by Barnes' Home, bears off the palm for completeness—it is the cleanest and most satisfactorily kept farm in the District, and affords an instance where large numbers of pigs can be kept clean, and without being a nuisance.

Some of the farms have the manure heap too near the shippens, by which the air before entering is vitiated with emanations of decomposition, especially is this the case if pig manure is present.

Farm buildings I found as a rule substantial and satisfactory. In only one instance did I find a shippon with unusually low ceilings; most of them had lofty ceilings, with peaked roofs, in these the ground space for each animal seemed to me very small.

The drainage is generally through ordinary grids, into a liquid manure tank, the contents of which are used for irrigating the fields; there is generally plenty of egress of foul gases from the tank.

Many farms are supplied with town's water; those that have pump water use it for the cattle, and the town's water for the house. One farm uses pump water for the house, and pond water for the cattle. In two instances I had reason to suspect the quality of the spring water used on the farm, and I directed the attention of the District Council to them.

My tour of inspection showed the extreme value and necessity of occasional supervision of farms and dairies.

*Tabular statement of mortality within the District,
classified according to Diseases, Ages, and Localities.*

The area of the District is 1638 acres, and the population at the middle of 1896 may be taken at 8235.

During the year 116 deaths were reported; of these 6 occurred at Mauldeth, viz., 1 male and 5 females; and 2 of children, boy and girl from Heaton Mersey, occurred outside the District in February. The Coroner held 6 inquiries.

The number of deaths to be accounted for is thus 112, viz., 63 males and 49 females, as compared with 48 and 46, respectively, last year.

112 deaths are equal to a death-rate of 13·6 per 1000 of population. The death rate for the whole of England was 17·1.

The deaths in each month were :—

January	14	April	8	July	7	October	13
February	17	May	5	August	10	November	2
March	15	June	5	September	6	December	10

The following table gives the mortality for each Ward.

Ward	Population	No. of Deaths	Death-Rate
Heaton Chapel	1818	28	15·4
Heaton Moor East	1882	18	9·56
Heaton Moor West	1919	18	9·38
Heaton Mersey	2616	48	18·3
Whole District.....	8235	112	13·6

The births were 125, viz., 56 males and 69 females, as compared with 78 and 67 respectively last year.

125 births are equivalent to a birth-rate of 15·17 per 1000 of population. The birth-rate for the whole of England was 29·7.

The following table gives the number of deaths at all ages, and from the principal diseases.

	Mortality from all causes at subjoined ages.							Mortality from subjoined causesdistinguishingdeaths of children under5yrs.ofage										
WARD	At all ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards		Scarlet Fever	Enteric Fever	Whooping Cough	Rheumatic Fever	Phtthisis	Bronchitis, Pneumonia and Pleurisy	Heart Disease	Injuries	All other diseases	Totals
Heaton Chapel Ward	28	6	1	1	3	7	10	Under 5 and upwards..	0	0	0	0	0	2	0	1	4	7
Heaton Moor East Ward ...	18	1	1	0	1	9	6	Under 5 and upwards..	0	0	0	0	0	1	0	0	1	2
Heaton Moor West Ward ...	18	0	0	0	3	8	7	Under 5 and upwards..	0	1	0	0	6	2	2	0	7	18
Heaton Mersey Ward	46	14	3	3	0	12	14	Under 5 and upwards..	1	0	0	0	0	4	0	2	10	17
Deaths occurring outside the Dist. in personsbelonging to it.	2	0	0	2	0	0	0	Under 5 and upwards..	2	0	0	0	0	0	0	0	0	2
Total ...	112	21	5	6	7	36	37	Under 5 and upwards..	1	0	0	0	0	7	0	3	15	26
									2	2	1	1	9	24	11	3	33	86
Deaths occurring within theDistrict of persons not belonging thereto at Mauldeth Hospital	6	0	0	0	0	4	2	Under 5 and upwards..	0	0	0	0	0	0	0	0	0	0
									0	0	0	0	1	1	0	0	4	6

Of children under 1 year 21 deaths are recorded. This is equal to an infant mortality of 168 per 1000 births, or 18·7 per cent. of total deaths.

Of children aged 1 year and under 5, there are 5 deaths recorded. This is equal to 4·5 per cent. of total deaths.

There were 6 deaths from the ordinary infectious diseases, equal to a death-rate of 0·7 per 1000 of population.

The following table gives these figures along with those of previous years.

Year	Population.	Death-Rate.	Birth-Rate	Infant Mortality	Zymotic Death-Rate
Average of 10 years 1882-91...	6672	11·52	20·23	19·80	1·26
1891	7150	10·76	17·77	11·68	1·12
1892	7440	13·03	18·80	17·52	0·67
1893	7500	13·70	16·40	15·63	1·46
1894	8000	10·37	21·75	18·00	1·00
1895	8172	11·50	17·74	18·00	0·36
1896	8235	13·60	15·17	18·70	0·72

The following table gives the number of deaths at various age-groups compared with previous years.

Year	At all ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards
1892	97	17	7	6	2	41	24
1893	103	16	7	14	8	35	23
1894	83	15	10	2	1	35	20
1895	94	17	9	4	5	39	20
1896	112	21	5	6	7	36	37

The following table shews the number of deaths from the ordinary infectious diseases.

	Average for 10 years, 1882-91.	1891	1892	1893	1894	1895	1896
Measles.....	1·3	1	0	0	6	0	0
Scarlet Fever	1·0	3	0	3	0	1	3
Diphtheria & MCroup	1·0	0	2	4	1	2	0
Whooping Cough ...	1·7	2	3	1	0	0	1
Enteric Fever	1·5	1	0	1	1	0	2
Diarrhoea	2·0	1	0	3	0	0	0
<i>Total.....</i>	8·5	8	5	12	8	3	6

The following table shews the mortality from certain classes of disease, the proportion to population, and to 100 deaths.

	Total Deaths	Deaths per 1000 of population	Proportion of Deaths to 100 Deaths.
Seven principal Zymotic Diseases..	6	0·72	5·3
Bronchitis and Pneumonia, not including Phthisis	31	3·72	27·6
Tubercular Diseases, (Phthisis, Scrofula, Rickets, Tabes).....	12	1·45	10·7
Wasting Diseases (Atrophy, Debility, and Premature Birth)	7	0·85	6·25
Convulsive Diseases	4	0·48	3·5

With regard to these statistics it is noticeable that there is an increase of 18 over the number of deaths last year; this is accounted for by the increase of 17 deaths in persons over 65 years of age. The infant mortality appears large when it is stated in terms of the number of births; though the number is only 4 in excess of, and the percentage of the total deaths almost the same as, that of last year. The reason the infant mortality for 1896 appears so large, *viz.*: 168 per 1000 births is not because the deaths were so numerous, but because the births were so few, *viz.*, 20 less than last year.

METEOROLOGICAL REPORT, 1896.

JANUARY.—At first the weather was fine and warm, with S.W. winds, which becoming more easterly, brought haze and cold. About the 9th, frosty and foggy weather prevailed, and the N.E. wind changing to N.W. brought dense fog and rain. On the 15th and 16th, the weather was wet and stormy, and after a few fine frosty days, the wind changed to S.W.; a little mild wet weather followed, with mist, and the month closed sunny, bright, fine, and warm. Mist observed on 15 days.

FEBRUARY.—The month opened dull, cool, and pleasant, a slight amount of rain fell during the first few days; the middle of the month was warm, with S.W. winds. In the latter half, the winds became S.E., and though the weather was cooler and inclined to be wet, yet we had a great deal of bright, sunny weather. Mist observed on 9 days.

MARCH.—A stormy, warm month, only 4 fine days, and the wind was almost entirely W.N.W. We had a few bright sunny days. There was a thunderstorm on the 24th. Mist observed on 6 days.

APRIL.—A dull, warm, fairly wet month, with squally weather on the 11th and 12th. During the 3rd week we had a spell of fine weather with a good deal of sunshine. The wind was W.N.W. almost entirely. Mist observed on 5 days.

MAY.—The first half of May was fine, bright, sunny, and warm, with E.S.E. winds. There was a change on the 18th, the wind became W.N.W., and we had 5 days of wet rather stormy weather. After that we had fine, bright, warm weather again, with E.S.E. winds. Haze observed on 4 days.

JUNE.—The fine weather of last month continued into June. There was a violent thunderstorm on the 4th, again on the 6th and 8th from the N.W., and a good deal of hail fell, after that we had fine, bright, sunny, hot weather, till the 16th, when, after a couple of wet days, the fine weather returned with W.N.W. winds, becoming easterly occasionally, interspersed with showers. The month closing stormy and wet. Haze observed on 3 days.

JULY.—The first few days were dull and wet, followed by a spell of beautiful summer weather, with a thunderstorm on the 9th, wind mostly W.N.W. In the latter half of the month, the wind was more southerly, and the weather was dull and showery. Haze observed on 3 days.

AUGUST.—The early part of month fine and dull, with easterly breezes, the wind changing to W.N.W. The weather for the remainder of the month was wet and dull, interspersed with a little thunder on the 19th and 26th.

SEPTEMBER.—A very dull wet month, the wind being mostly from the south, interspersed with north and easterly variations. A little thunder occasionally. The latter half was rather stormy, with sudden and considerable falls of the barometer.

OCTOBER.—This also was a wet month, southerly winds prevailing. Weather stormy from 7th to 11th. A thunderstorm on the 10th, and snow on the 11th. During the last 10 days the weather was frosty in the mornings. Mist observed on 10 occasions.

NOVEMBER.—On the whole was fine, bright, and cold, with a sprinkling of sunshine. There was a fair amount of rain in the middle of the month, with a change of wind from

N.N.E. to S.S.W., and the weather was occasionally rather miserable, being cold and wet. The month closed with E.S.E. winds, and bright cheerful weather.

DECEMBER.—Was a wet month, and is difficult to describe in a few words, because, though we had a fair amount of cheerful weather, it was subject to sudden and remarkable changes, especially during the 2nd and last quarters of the month, and in consequence common influenza largely prevailed.

There was much mist, and the winds were easterly at first, and latterly W.N.W. and W.S.W. The barometric pressure was constantly changing.

The end of the month was very warm, and the year closed in rain.

	Mean Reading of Barometer.		Mean daily temperature.		Rainfall in inches	
	1895	1896	1895	1896	1895	1896
1st Quarter ..	29·818	30·100	34·0	41·3	5·475	6·755
2nd Quarter ..	29·967	30·095	51·7	53·2	4·645	5·805
3rd Quarter..	29·900	29·797	58·9	57·2	9·820	9·735
4th Quarter...	29·791	29·855	43·9	40·8	9·230	8·575
	29·869	29·962	47·1	48·1	29·170 on 186 days	30·870 on 204 days

The barometric pressure was higher than it was in 1895, especially the first half of the year; and in the same period the mean daily temperature of the air also was higher. It reached its maximum 65·7 (on the 15th 83·0) in the 3rd

week in June, which was also the dryest week of the year, with 66 per cent of total saturation at 9 a.m. The lowest temperature in the shade in June—the hottest month—was 43° , and on the grass 38° .

The lowest temperature during the year on the grass was $18\cdot2$ in February, and in 1895,— $3^{\circ}\cdot5$. The greatest amount of sun-heat was registered in July, *viz.*, $135\cdot5$.

The rainfall was $1\cdot7$ more than that of the previous year, and there were 18 more wet days. On the whole, 1896 was more continuously wet than 1895.

September was the wettest month, with $5\cdot265$ inches of rain, which fell on 25 days. June was 5th in order of largest rainfall, with $3\cdot550$ inches, which fell on 15 days.

May was the finest month—there were only 5 wet days.



Summary of METEOROLOGICAL OBSERVATIONS for 1896.

Taken by F. W. JORDAN, M.R.C.S., at Heaton Moor, Lancashire, at 9 a.m. daily.

BAROMETER				TEMPERATURE.													
Cistern 240ft. above sea-level. Observations reduced to sea-level and to 32 degs. F.																	
Month	Highest	Lowest	Average	In Shade.			Black bulb, highest in sun	Bright Bulb same as dash blk	On Grass		Earth, 2ft. deep	Average humidity, per cent. 9a.m.	Rainfall	Days on which Rain fell	Cloud 9 a.m. entirely over-cast, equals 100		
				Highest	Lowest	Mean daily temperature			Highest	Lowest							
1896																	
JANUARY	30° 9' 76	29° 36' 6	30° 30' 4	52° 8	27° 0	40° 4	90° 0	62° 0	44° 0	22° 0	42° 5	37° 5	40° 5	92	1° 10' 5	13	9
FEBRUARY	30° 7' 00	29° 6' 13	30° 27' 8	54° 2	26° 5	40° 5	97° 8	67° 8	41° 5	18° 2	42° 0	38° 2	41° 0	89	1° 7' 90	13	8
MARCH	30° 2' 86	28° 6' 28	29° 7' 18	59° 5	31° 5	43° 0	110° 2	74° 0	44° 8	22° 5	44° 8	40° 8	42° 4	86	3° 8' 60	27	8
APRIL	30° 4' 90	29° 6' 35	30° 12' 4	63° 5	31° 2	47° 8	114° 2	77° 5	49° 0	27° 0	49° 0	42° 2	45° 5	84	1° 6' 50	16	7
MAY	30° 4' 92	29° 8' 55	30° 25' 1	77° 5	32° 2	51° 8	127° 0	90° 2	55° 5	28° 0	54° 0	47° 0	50° 9	74	0° 6' 05	5	5
JUNE	30° 2' 26	29° 4' 92	29° 9' 09	83° 0	43° 0	59° 9	132° 0	98° 0	56° 8	38° 0	61° 2	54° 5	57° 7	75	3° 5' 50	15	7
JULY	30° 2' 92	29° 6' 10	29° 9' 92	80° 5	41° 2	59° 6	135° 5	97° 2	58° 0	35° 2	61° 5	57° 0	59° 5	76	1° 9' 60	15	7
AUGUST	30° 2' 84	29° 6' 07	29° 6' 89	70° 5	40° 0	57° 3	124° 0	84° 5	56° 0	33° 5	59° 0	55° 0	57° 5	80	2° 5' 10	19	9
SEPTEMBER	39° 4' 75	28° 6' 61	29° 7' 08	70° 2	38° 2	54° 9	119° 2	76° 5	54° 5	30° 0	57° 2	52° 0	55° 3	87	5° 2' 65	25	9
OCTOBER	30° 4' 38	29° 1' 20	29° 7' 09	63° 8	25° 5	44° 4	115° 0	80° 2	49° 0	22° 0	53° 0	42° 0	48° 2	88	3° 7' 40	22	9
NOVEMBER	30° 6' 53	29° 1' 94	30° 1' 41	51° 8	25° 8	39° 2	92° 0	66° 0	41° 0	19° 5	42° 5	39° 0	40° 7	90	1° 2' 30	10	8
DECEMBER	30° 3' 64	28° 7' 14	29° 7' 16	53° 8	28° 0	38° 8	88° 5	65° 5	40° 0	21° 0	42° 0	37° 0	39° 7	89	3° 6' 05	24	9

